

Remarks

Claim Rejections U.S.C. §102(b)

The Examiner has rejected claims 1, 2, 4, 5, 7, 8, 17, 18, 22, and 23 under 35 U.S.C. 102(b) as being anticipated by Papathomas. It is Applicant's understanding that Papathomas does not teach the invention claimed in claims 1, 2, 4, 5, 7, 17, 18, 22, and 23.

Applicant claims in the aforementioned claims an electronic device, system, and method of forming the same comprising a substrate having at least one **buildup layer embedded within**, wherein the buildup layer comprises at least one filler with a negative coefficient of thermal expansion. That is, Applicant claims an electronic device, system, and method of forming the same comprises a "substrate having at least one **buildup layer embedded within**, wherein the buildup layer comprises at least one filler with a negative coefficient of thermal expansion.

Applicant's claim of an electronic device, system, and method of forming the same comprising a substrate featuring a buildup layer embedded within, which comprises a binder and a filler having a negative coefficient of thermal expansion is supported in the application. Figure 1 of the application illustrates substrate 100 featuring buildup dielectric material 120 within. That is, buildup dielectric material 120 is part of substrate 100, wherein substrate 100 is subsequently bonded to a semiconductor die.

It is Applicant's understanding that Papathomas fails to disclose a electronic device, system, or method of forming the same comprising a substrate having at least one buildup layer embedded within, wherein the buildup layer comprises at least one filler with a negative coefficient of thermal expansion. Papathomas does disclose an electronic package having a substrate (2) having an

upper surface (4), a semiconductor die (6) electrically coupled and mounted on a portion of the upper surface of the substrate (2). The semiconductor die (6) having a bottom surface (8) and at least one edge surface (12) being substantially perpendicular to the bottom surface and a material, wherein the material has an encapsulant composition which includes a filler material. It is Applicant's understanding that the material comprising the encapsulant composition is between the substrate and the semiconductor chip and along with substrate (2) are separate and individual components of the electronic package.

Therefore, it is Applicant's position that Papathomas does not teach an electronic device comprising a substrate featuring a buildup layer embedded within, wherein the buildup layer comprises a binder and a filler having a negative coefficient of thermal expansion. Also, the Applicant requests claims 2-3, 5-6, 18-19, and 22-23 allowable upon the allowance of base claims, 1, 4, 7, 17, and 22.

The Examiner has objected to Claim 9, but has indicated that it would be allowable if rewritten in independent form including all intervening claims. Applicant has amended **base claim 7** to include the limitations of dependent claim 9 and intervening claim 8. Applicant has cancelled claims 8 and 9. Accordingly, claim 7 is now in condition for allowance.

Additionally, the Examiner has allowed Claim 10, 12, 14, 20 and 21 which the Applicant accepts and respectfully leaves un-amended.



**PETITION FOR EXTENSION OF TIME
PURSUANT TO 37 C.F.R. § 1.136 (a)**

Applicant respectfully petitions pursuant to 37 CFR 1.136(a) for a one-month extension of time to file this response to the Final Office Action mailed July 12, 2005. The extended period is set to expire on November 12, 2005. A check in the amount of \$120.00 is enclosed to cover the fee for a one-month extension of time.

Pursuant to 37 C.F.R. 1.136(a)(3), applicant(s) hereby request and authorize the U.S. Patent and Trademark Office to (1) treat any concurrent or future reply that requires a petition for extension of time as incorporating a petition for extension of time for the appropriate length of time and (2) charge all required fees, including extension of time fees and fees under 37 C.F.R. 1.16 and 1.17, to Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

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